

AMENDMENTS

Amendments to the Claims

- 1-36 (Cancelled)
- 37) (Withdrawn) A composition comprising a safe and effective amount of a lipid hydrolyzing protein or polypeptide and a pharmaceutically acceptable carrier.
- 38) (Withdrawn) The composition of claim 37 wherein the lipid hydrolyzing protein or polypeptide is the protein lysosomal acid lipase.
- 39) (Withdrawn) The composition of claim 37 wherein the lipid hydrolyzing protein or polypeptide is a protein showing at least 85% sequence homology to lysosomal acid lipase.
- 40) (Withdrawn) The composition of claim 37 wherein said lipid hydrolyzing protein or polypeptide is a polypeptide possessing similar biological activity as lysosomal acid lipase.
- 41) (Withdrawn) The composition of claim 37 wherein said lipid hydrolyzing protein or polypeptide is a protein having a Ser¹⁵³ residue.
- 42) (Withdrawn) The composition of claim 37 wherein said lipid hydrolyzing protein or polypeptide is a polymorphic variant protein of lysosomal acid lipase with substitution of amino acid Pro(-6) to Thr and Gly2 to Arg.
- 43) (Withdrawn) The composition of claim 38 wherein the lysosomal acid lipase has fewer than six N-linked acetylglycosylation residues.
- 44) (Withdrawn) The composition of claim 38 wherein the lysosomal acid lipase has more than six N-linked acetylglycosylation residues.
- 45) (Withdrawn) The composition of claim 43 wherein the N-acetylglycosylation residue is oligosaccharide-terminated.
- 46) (Withdrawn) The composition of claim 45 wherein the oligosaccharide terminating residue is a mannose residue.
- 47) (Withdrawn) The composition of claim 44 wherein the N-acetylglycosylation residue is oligosaccharide-terminated.

- 48) (Withdrawn) The composition of claim 47 wherein the oligosaccharide terminating residue is a mannose residue.
- 49) (Withdrawn) A composition comprising a safe and effective amount of lysosomal acid lipase in a pharmaceutically acceptable carrier.
- 50) (Withdrawn) A composition comprising a safe and effective amount of a lipid hydrolyzing protein showing at least 85% sequence homology to lysosomal acid lipase in a pharmaceutically acceptable carrier.
- 51) (Currently Amended) A method for providing biologically active lipid hydrolyzing protein or polypeptide, or mixtures thereof, to cells ~~having a deficiency in biologically active lipid hydrolyzing protein or polypeptide~~, said method comprising administration into cells a vector comprising and expressing a DNA sequence encoding biologically active lipid hydrolyzing protein or polypeptide wherein the sequence contains the catalytic lipase triad Asp-Ser-His, and expressing the DNA sequence in said cells to produce biologically active lipid hydrolyzing protein or polypeptide.
- 52) (Original) The method of claim 51 wherein the cells harboring the vector secrete the biologically active lipid hydrolyzing protein or polypeptide which is taken up by other cells deficient in lipid hydrolyzing protein or polypeptide.
- 53) (Original) The method of claim 51 wherein the biologically active human lipid hydrolyzing protein or polypeptide is lysosomal acid lipase.
- 54) (Currently Amended) The method of claim 51 wherein the biologically active human lipid hydrolyzing protein or polypeptide is a protein having at least 85% sequence homology to lysosomal acid lipase showing biological activity similar to that of lysosomal acid lipase.
- 55) (Original) The method of claim 51 wherein the biologically active human lipid hydrolyzing protein or polypeptide is a polymorphic variant protein of lysosomal acid lipase with substitution of amino acid Pro(-6) to Thr and Gly2 to Arg.
- 56) (Currently Amended) A method for providing biologically active lysosomal acid lipase to cells of a mammal ~~having a deficiency in biologically active lysosomal acid lipase~~, said method comprising administration into said cells a vector comprising and expressing

- a DNA sequence encoding biologically active lysosomal acid lipase and expressing the DNA sequence in said cells to produce biologically active lysosomal acid lipase.
- 57) (Original) The method of claim 56 wherein the cells harboring the vector secrete biologically active lysosomal acid lipase which is taken up by other cells deficient in lysosomal acid lipase.
- 58) (Original) The method of claim 56 wherein the vector is a viral vector.
- 59) (Original) The method of claim 58 wherein the viral vector is selected from the group consisting of a lentivirus, adenovirus, adeno-associated virus and virus-like vectors.
- 60) (Original) The method of claim 56 wherein the vector is a plasmid.
- 61) (Original) The method of claim 56 wherein the vector is a lipid vesicle.
- 62) (Withdrawn) A method for providing biologically active lysosomal acid lipase to cells of a mammal with atherosclerosis, comprising administration into the cells of said mammal an amount of a vector comprising and expressing a DNA sequence encoding lysosomal acid lipase and which is effective to transfect and sustain expression of biologically active lysosomal acid lipase in cells deficient therein.
- 63) (Withdrawn) The method of claim 62 wherein the expressed lysosomal acid lipase is secreted from the infected cells and is taken up by other cells deficient therein.
- 64) (Withdrawn) A method for treatment of Wolman's Disease in a mammal comprising administering to said mammal a safe and effective amount of lysosomal acid lipase sufficient to treat said condition.
- 65) (Withdrawn) A method for treatment of Cholesteryl Ester Storage Disease in a mammal comprising administering to said mammal a safe and effective amount of lysosomal acid lipase sufficient to treat said condition.
- 66-68 (Canceled)